About ModemGPH

ModemGPH monitors your Dial-Up Networking modem Internet connection. All data sent and received via the modem is plotted on a graph with optional statistics information displayed at the bottom of the graph.

To use this utility, you need to be using Microsoft Dial-Up Networking.

To check,
- start ModemGPH
- right-click on the modem icon in the Task Bar
- select DialUp Manager...
- if any of you existing Internet connections are visible, ModemGPH will work

If no connections are visible, you can create a new connection.

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Sent bytes

Plots the actual bytes sent over the modem in the last second.

You can change the time interval from parts of a second to minutes.

Sent bytes per second

Plots the current sent bytes per second rate.

This rate is calculated over time. You can specify the time period - since the program has been running or to use the Seconds to Plot setting.

Received bytes

Plots the actual bytes received through the modem in the last second.

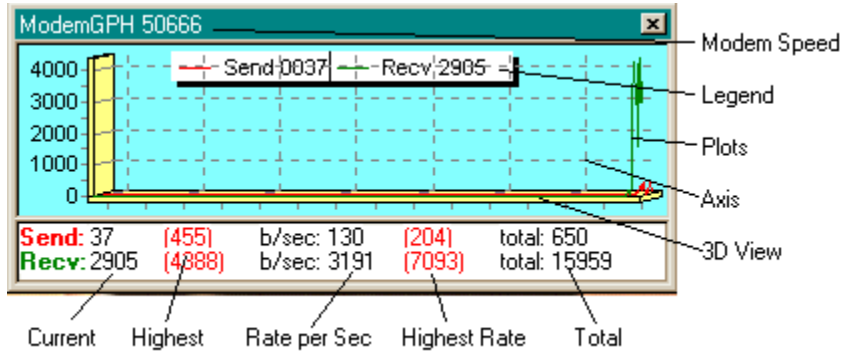You can change the time interval from parts of a second to minutes.

Received bytes per second

Plots the current received bytes per second rate.

This rate is calculated over time. You can specify the time period - since the program has been running or to use the Seconds to Plot setting.

Statistics

Statistics are display in a small panel at the bottom of the graph. This display show data in numerical form and can be turned off if desired.

Send: - xxxx   - data sent out this interval
     - (xxxx) - largest amount sent in one interval
     - b/sec: - current send rate
     - (xxxx) - highest send rate
     - tot: - total bytes sent

Recv: - xxxx   - data received in this interval
     - (xxxx) - largest amount received in one interval
     - b/sec: - current receive rate
     - (xxxx) - highest receive rate
     - tot: - total bytes received

All of these rates are set to zero when the program is started or the Reset option is selected.

Legend

Legend for the graph can be turned on or off.

Note: the legend display is not accurate as it sometimes displays items are not plotted.

3D View

The graph can be display in 3D - at an angle there the plot lines are slightly apart from each other.

The Axis is changed to a flat bar and its width will change depending on the number of plot lines selected.

Axis

Graph Axis is the vertical and horizontal bar with numbers that can be use as a guide to determine the position of the plot lines.

The Vertical Axis can be fixed (set at a fixed number) or floating where the program will grow and shrink the graph size based on the data.

Axis Grid Lines

Grid lines are lines that run across the graph face which makes it easier to figure out the plots.

This option will only work if the Axis Display is enabled.

Vertical Scale on the Right

The Vertical scale can be moved from its default position on the left of the graph to the right.

Hide Graph if no Connection

The first version of ModemGPH was a fixed graph on the screen. The graph was always visible even if you were not connected to the Internet.

The next version had a feature that shrunk the graph out of view into a thin bar (CPU Monitor) when not connected.   The graph will automatically grow to its original size when a connection to the Internet was detected.

This version gives you both features - choose which ever you want, just be aware that turning this flag on and off all the time may require you to resize the graph as it may loose its size.

CPU Monitor

On the far right of the graph is a coloured vertical bar that measures the current CPU usage level - as a percentage.

This was put in so I could stop using other CPU monitoring utilities on my PC, and to act as an anchor for the graph when you were not connected to the Internet.

BPS Rate Calculations

ModemGPH provides two methods to calculate the send and receive rate.

Rate is volume of data over time - from some point in time till now.

For BPS calculations - the start time can be:
   a) since the program started or a Reset was done, or
   b) for the length of the visible plot (graph size)

Graph size is the number of Samples to Plot multiplied by the Sample Rate.

For example - the default setting for Samples to Plot is 200 and the Sample Rate is 1 second - if b) is selected, the BPS rate will be based on the past 200 seconds worth of data.

Samples to Plot

You can adjust the number of samples that you want to plot on the graph. The bigger the graph window the greater the number of samples you can plot on it. Default is 200.

Vertical Scale Size

Vertical scale size can be fixed or can adjust to the number of bytes sent or received. Select 0 to have the graph resize itself as the samples vary in size.

For a 56K modem, you can fix the Vertical Scale at 7000.

Sampling Rate

Sampling Rate is how often the program reads values from the operating system.   Default is 1000 which equates to 1 second.

Please note that changing this rate will reflect on the send and received data displayed on the graph. The BPS rate will not be affected as it is always calculated for a second.

For example, if your current receive figure is 6000, changing this sample rate to 500 (from 1000), your current receive figure will display 3000 - i.e. 3000 bytes per half a second.

Colour

You should be able to change just about any of the colours in ModemGPH. Let me know if I have missed anything.

Currently you can change colors for:
- background - graph and statistics
- sent bytes - plot line and numbers
- sent b/sec rate - plot line and numbers
- received bytes - plot line and numbers
- received b/sec rate - plot line and numbers
- 3D wall
- grid, axis and totals

Plot Line Size

The plot lines can be thick or thin. If you select Automatic, the current send and receive plot lines will be thin and the BPS rates will be thick.

Background Picture

Select a JPG, JPEG or BMP image to display as the graph background. All plot lines, axis and legends will be displayed on top of this image.

Show/Hide Display

You can show or hide the display by selecting this menu item. Alternately you can left-click the modem icon in the Task bar.

No Title

You can hide the window title selecting this menu item. Alternately you can double click the left mouse button anywhere on the graph window itself.

Stay On Top

You can force the graph to stay on top of all other windows on the desktop by selecting this menu item.

Autostart With Windows

You can have Windows automatically start ModemGPH when it starts by having this menu item always selected.

When un-installing ModemGPH, please disable this flag first before deleting the ModemGPH programs.

Start Minimized

When ModemGPH starts, it can start minimised or it can immediately display the graph.

Check for Updates

New versions of ModemGPH are available at the website. You can check and download a new version immediately by selecting this option.

If a newer version is available, you will have the option of viewing notes relating to the new features before you download.   You can opt not to download.

All you existing settings (in ModemGPH.INI) and Launch List (in ModemGPH.LCH) will not be overwritten.

All new features will be disabled so as not to affect your existing setup. You can turn on the features as you prefer.

Troubleshooting

ModemGPH works on Windows95 and Windows98 and uses Microsoft Dial-Up Networking which is part of the base operating system.   Microsoft has released a newer version of Dial-Up Networking for Windows95, which you can download by selecting this Troubleshooting menu item.

ModemGPH will NOT work with WindowsNT or Windows2000. It will also NOT work with cable modems unless they use Dial-Up Networking.

If your graph displays negative or very large numbers you may not have Dial-Up Networking installed.

Reset Totals

You can reset all totals by selecting this menu item. All rates and totals will be set to zero.

Keyboard/Mouse Shortcuts

Keyboard Shortcuts (while ModemGPH is the active window):
space - will bring up the main menu
w   - change the wallpaper
t   - tell the time

Mouse clicks on Modem icon in Task Bar:
single left button   - show/hide graph
single right button - show menu

Mouse clicks on Modem Graph window:
double left button   - show/hide window title
single right button - show menu
hold left button on window   - re-position graph window
hold left button on edge   - re-size graph window
hold left button on slipper - re-size clock pane
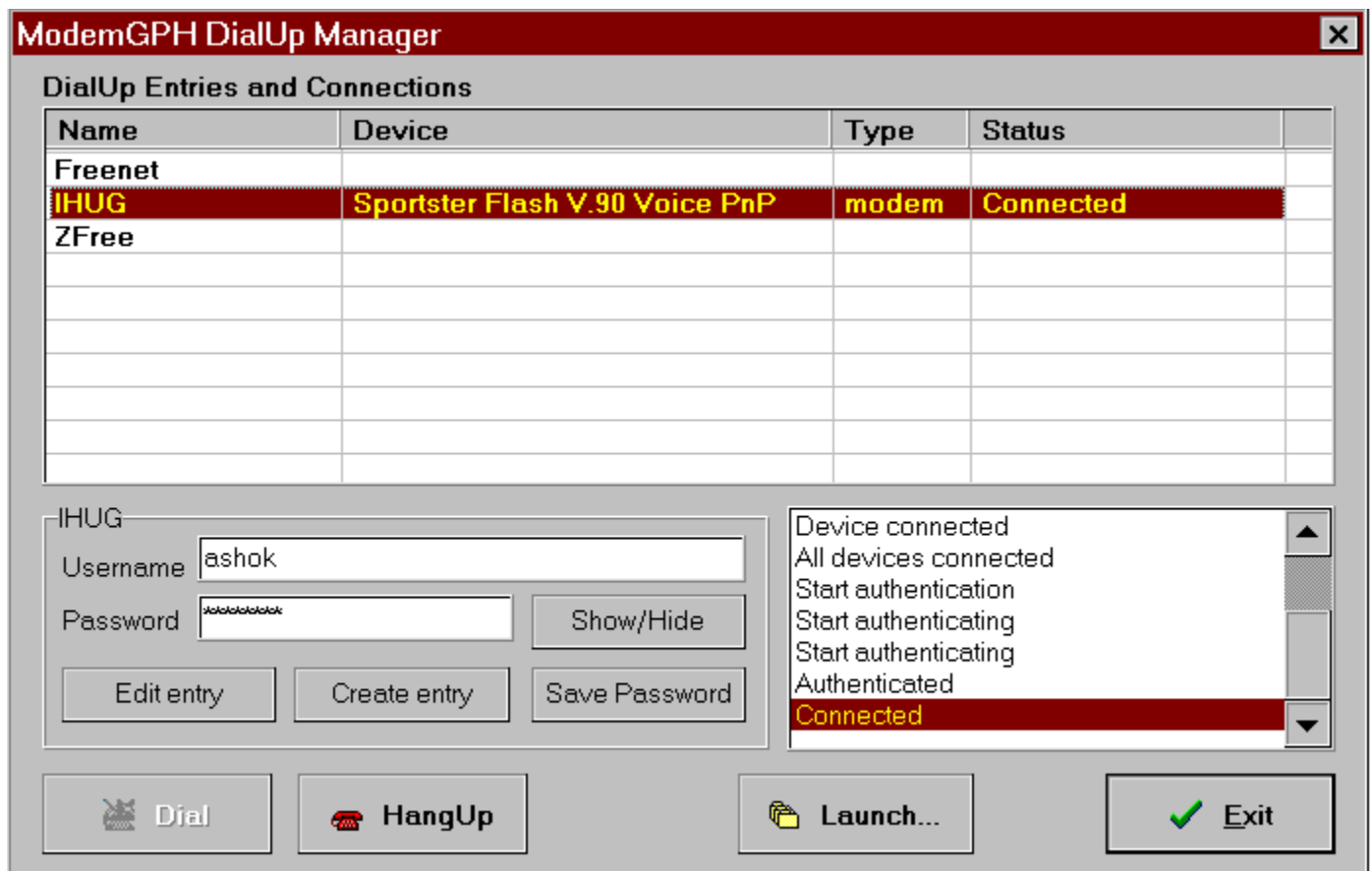
DialUp Manager

DialUp Manager allows you to manage your Internet connections using Microsoft Dial-Up Networking.

Listed are you active connections and their connected status. Select an entry and press either the **Dial** or **HangUp** buttons. You can also double click the left mouse button.

You can also change your **User ID** and **Password** . Press the **Save Password** button.

You can **Edit** or **Create** New DialUp entries. Pressing these buttons will bring up the Windows DialUp Connections dialogs.

When a connection is made, this dialog will disappear.
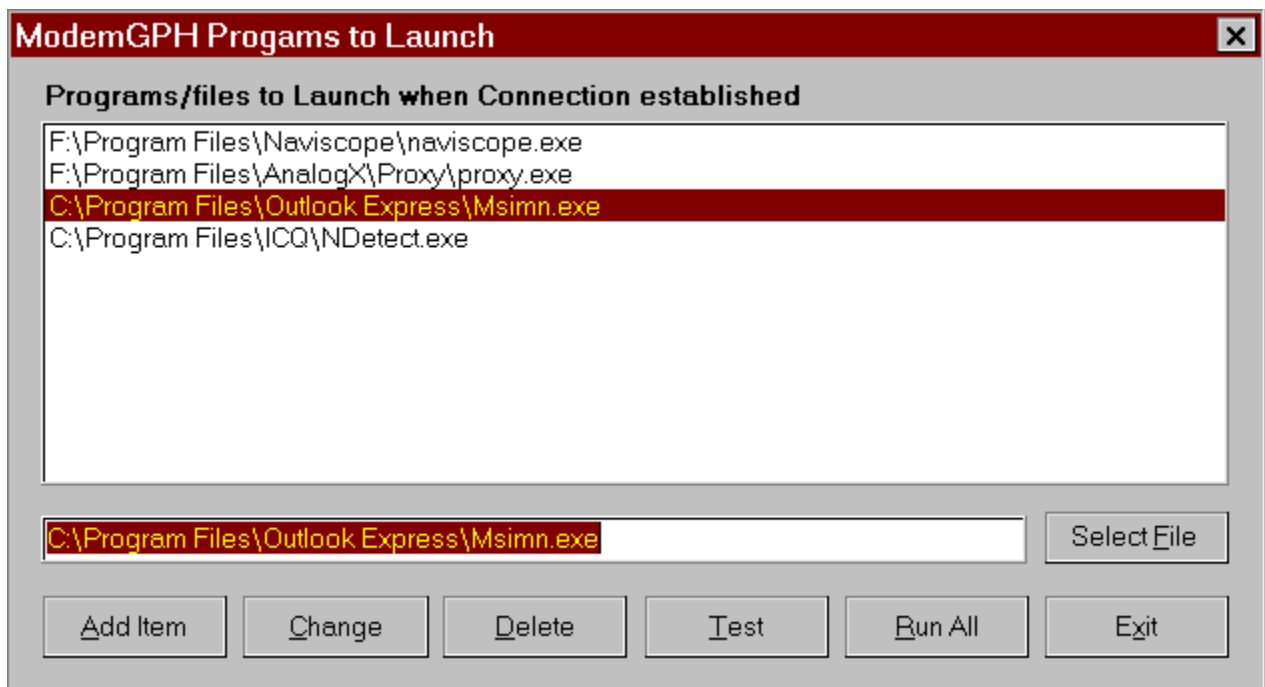
Launch List

Launch List allows you to specify programs that will be automatically started when a connection is made to the Internet.

Type a program name or use the **Select File** button to locate a program that you want started. Press **Add Item** to insert the program into the Launch List.

To change and existing program, select it from the list and the program information will be displayed in the edit box. Change what you want and press **Change** to save it.

You can run a program now by selecting it from the list and pressing the **Test** button.

To start all programs now press the **Run All** button.

Connection Logging

Connection logging creates a log file of all Internet connections showing the date and time the connection was made as well as totals sent and received, rates, averages elapsed times for each connection.
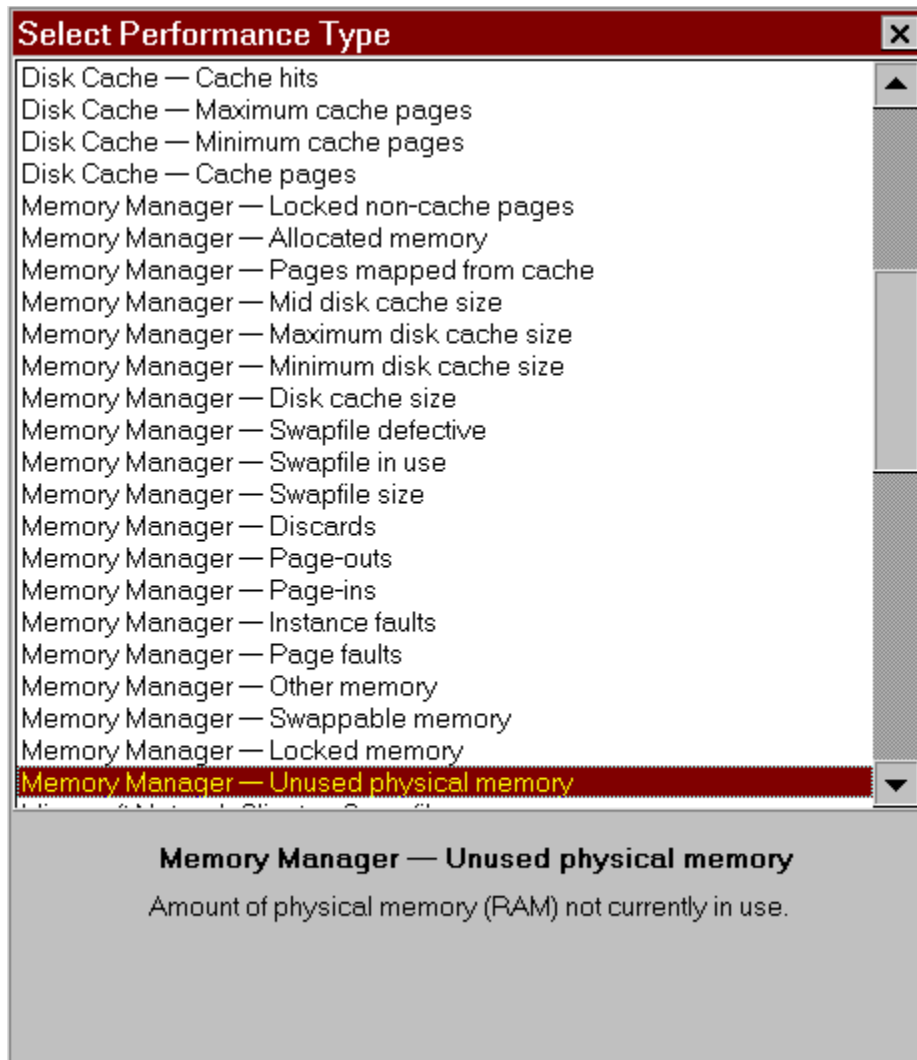
You can view the log file from the menu and have the option to delete the current log file. Only one log file is kept - **MODEMLOG.TXT** . You can make a copy of this file if you need to keep previous logs.

Performance Monitor

You can setup ModemGPH to monitor other aspects of your PC. These include: available memory, swapfile size, network transmissions etc. At present only one item can be monitored.
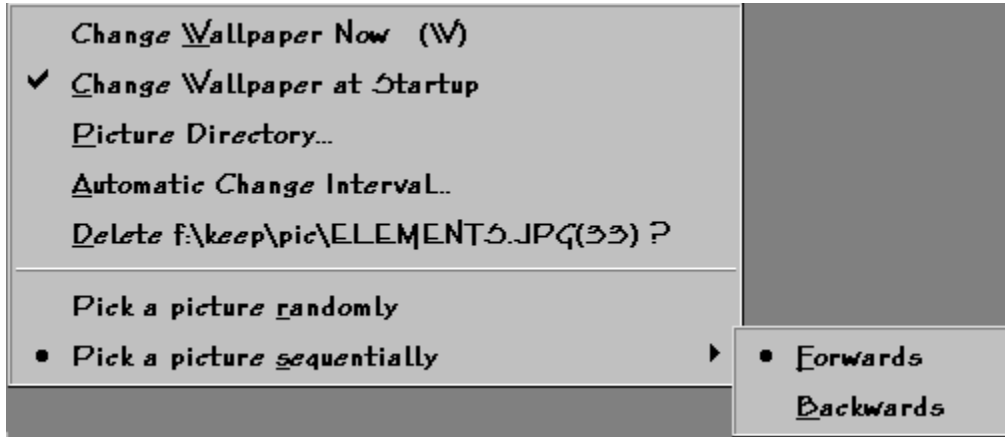
All available items that can be monitored in your system are displayed in a list. Select any item - it will be displayed instantly in the ModemGPH statistics window.

To disable performance monitoring - select the first item on the list titled --Disable.

Wallpaper Changer

Since ModemGPH is already running on your PC, you can get it to change the Windows Desktop Wallpaper at a regular interval.

To setup, select a directory where you keep all your images - *.BMP, *.JPG and *.JPEG - e.g.   F:

Next, specify Change Interval in seconds - e.g. 300 seconds - to change the wallpaper every 5 minutes. Enter 0 to disable the automatic change option.

Next, select how you want ModemGPH to select an image from the image directory - randomly or sequentially - forwards or backwards.

You can also get ModemGPH to change the wallpaper as it starts up.

Clock

ModemGPH also contains a digital clock that can be displayed above the graph.

Adjust the clock pane by moving the mouse pointer over the line dividing the clock and the graph. The mouse pointer will change to a splitter symbol - left click the mouse at this point and drag the split to resize the clock. Change the font and digits colour as well as the background colour to suite.

Hourly strike has options to disable the strike, to sound like a cuckoo clock or to speak (in a male voice) the actual time. Press **T** to get the program to speak the current time.